

WHAT IS CLAIMED IS:

1. A motor comprising:

a rotor having a rotor shaft projecting axially outward from opposite ends of said rotor;

a stator having a stator core consisting of a plurality of circular substrates arranged in layers, said stator core having a plurality of first grooves formed on a cylindrical outer surface of said stator core such that said first grooves are arranged at predetermined spacing along a circumferential direction and extend in an axial direction;

right and left brackets each assuming the form of a bottomed cylinder, each of said right and left brackets having a bearing portion at a bottom portion so as to support said rotor shaft, a plurality of engagement projections formed at an axially inner end in such a manner as to project axially inward so as to be fitted into said first grooves, and a plurality of second grooves formed on a cylindrical outer surface such that said second grooves are arranged at predetermined spacing along the circumferential direction and extend in the axial direction and such that said second grooves formed on said right bracket are aligned with those formed on said left bracket; and

a plurality of binders each having opposite ends bent so as to form engagement portions, said binders being fitted into said second grooves such that the engagement portions are engaged with axially outer ends of said right and left brackets to thereby clamp said stator core axially inward

from opposite sides.

2. A motor according to Claim 1, wherein said first grooves are dovetail grooves.

3. A motor according to Claim 1 or 2, wherein said second grooves are shallow grooves whose cross sections each assume a shape of a squarish letter U.

4. A motor according to Claim 1, wherein each of said engagement portions of said binders has a protrusion projecting axially inward; and a plurality of recesses to be engaged with said protrusions are formed on the axially outer end surfaces of said right and left brackets.

5. A motor comprising:  
a rotor having a rotor shaft projecting axially outward from opposite ends of said rotor;  
a stator having a stator core consisting of a plurality of circular substrates arranged in layers, said stator core having a plurality of dovetail grooves formed on a cylindrical outer surface of said stator core such that said dovetail grooves are arranged at predetermined spacing along a circumferential direction and extend in an axial direction; and  
right and left brackets each assuming the form of a

bottomed cylinder, each of said right and left brackets having a bearing portion at a bottom portion so as to support said rotor shaft, and a plurality of engagement projections formed at an axially inner end in such a manner as to project axially inward so as to be fitted into said dovetail grooves, wherein

opening edge portions of said dovetail grooves are caulked while said engagement projections are fitted into said dovetail grooves, so as to fix said engagement projections and said dovetail grooves to each other, to thereby clamp said stator core axially inward from opposite sides.